

Serial No. 10/023,094

**Amendments to the Claims:**

These claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method for combining a data packet in a communication system, the method ~~comprising the steps of:~~

receiving a transmission of said data packet to obtain a received packet;

demodulating said received packet to be stored in a first storage medium;

determining whether said received packet is a retransmitted packet ~~by examining a medium access control (MAC) frame in said received packet and said stored packet~~ according to at least one predetermined criterion; and[[,]]

if so, combining said received packet with a previous packet stored in a second storage medium using a maximum ratio combining method.

2. (currently amended) The method of claim 1, wherein the ~~step of~~ determining whether said received packet is a retransmitted packet further comprises ~~the steps of:~~

determining whether [[a]] corresponding length field fields of said received packet and said ~~stored previous~~ packet are the same;

determining whether a retry bit field of said received packet is activated when the corresponding length field fields of said received packet and said ~~stored previous~~ packet are the same; and[[,]]

Serial No. 10/023,094

determining whether ~~[[a]]~~ corresponding sequence control ~~field~~ fields of said received packet and said ~~stored~~ previous packet are the same when the retry bit field of said received packet is activated.

3. (currently amended) The method of claim 1, wherein the ~~step of~~ determining whether said received packet is a retransmitted packet further comprises ~~the step of~~ determining whether ~~[[an]]~~ corresponding address ~~field~~ fields of said received packet and said ~~stored~~ previous packet are the same.

4. (currently amended) The method of claim 1, wherein the ~~step of~~ combining the received packet with said previous packet is performed according to a signal-to-noise ratio (SNR) symbol of said received packet and said ~~stored~~ previous packet.

5. (canceled)

6. (currently amended) The method of claim 1, wherein the ~~step of~~ combining said received packet with said stored packet is performed in an access point (AP).

7. (currently amended) The method of claim 6, wherein the ~~step of~~ combining said received packet with said ~~stored~~ previous packet is performed in a mobile station in communication with said AP.

Serial No. 10/023,094

8. (currently amended) The method of claim 1, wherein the ~~step of~~ determining whether said received packet is a retransmitted packet further comprises ~~the steps of~~:

determining whether ~~[[a]]~~ corresponding length field fields of said received packet and said previous packet are the same;

determining whether a retry bit field of said received packet is activated when the corresponding length field fields of said received packet and said previous packet are the same;

determining whether ~~[[an]]~~ corresponding address field fields of said received packet and said previous packet are the same when the retry bit field of said received packet is activated;  
and~~[[,]]~~

determining whether ~~[[a]]~~ corresponding sequence control field fields of said received packet and said previous packet are the same when the address field of said received packet and said previous packet are the same.

9. (currently amended) A method for combining a data packet in a communication system, the method comprising ~~the steps of~~:

receiving and storing a transmission of said data packet in a first storage medium to obtain a received packet;

extracting a physical layer convergence protocol (PLCP) and MAC header from said received packet ~~stored in said first storage medium~~;

comparing ~~[[the]]~~ corresponding PLCP and MAC header headers of said received data packet ~~stored in said first storage medium~~ and a previously received packet with error stored in a second storage medium to determine whether said received packet is a retransmitted packet;  
and~~[[,]]~~

Serial No. 10/023,094

if so, combining said received packet with said previous packet ~~stored in a second storage medium~~ using a maximum ratio combining method.

10. (currently amended) The method of claim 9, wherein the ~~step of~~ combining the received packet with said previous packet is performed according to a signal-to-noise ratio (SNR) symbol of said received packet and said previous packet.

11. (currently amended) The method of claim 9, wherein the ~~step of~~ determining whether said received packet is said retransmitted packet further comprises ~~the step of~~ determining whether ~~[[an]]~~ corresponding address ~~field~~ fields of said received packet and said previous packet are the same.

12. (currently amended) The method of claim 9, wherein the ~~step of~~ determining whether said received packet is said retransmitted packet further comprises ~~the steps of~~:

determining whether ~~[[a]]~~ corresponding length ~~field~~ fields of said received packet and said previous packet are the same;

determining whether a retry bit field of said received packet is activated when the corresponding length ~~field~~ fields of said received packet and said previous packet are the same; and~~[[,]]~~

determining whether ~~[[a]]~~ corresponding sequence control ~~field~~ fields of said received packet and said previous packet are the same when the retry bit field of said received packet is activated.

Serial No. 10/023,094

13. (currently amended) The method of claim 9, wherein the ~~step of~~ combining said received packet with said previous packet is performed in an access point (AP).

14. (currently amended) The method of claim 13, wherein the ~~step of~~ combining said received packet with said previous packet is performed in a mobile station in communication with said AP.

15. (currently amended) The method of claim 9, wherein the ~~step of~~ determining whether said received packet is said retransmitted packet further comprises ~~the steps of~~:

determining whether ~~[[a]]~~ corresponding length ~~field~~ fields of said received packet and said previous packet are the same;

determining whether a retry bit field of said received packet is activated when the corresponding length ~~field~~ fields of said received packet and said previous packet are the same;

determining whether ~~[[an]]~~ corresponding address ~~field~~ fields of said received packet and said previous packet are the same when the retry bit field of said received packet is activated; and~~[[,]]~~

determining whether ~~[[a]]~~ corresponding sequence control ~~field~~ fields of said received packet and said previous packet are the same when the address field of said received packet and said previous packet are the same.

16. (currently amended) An apparatus for combining a data packet in a communication system, comprising:

Serial No. 10/023,094

~~a demodulation means~~ demodulator for demodulating a transmission of said data packet to obtain a received packet;

a first storage ~~means~~ for storing said received packet;

a second storage ~~means~~ for storing a previous packet with error; and,

a processor for determining whether said received packet is a retransmitted packet in response to said previous packet ~~by comparing a medium access control (MAC) frame of said received packet and said previous packet~~ according to at least one predetermined criterion;  
and[[,]]

~~a combining means~~ an adder for ~~combining~~ adding said received packet with said previous packet when said at least one predetermined criteria criterion is satisfied.

17. (currently amended) The apparatus of claim 16, further comprising at least one antenna for receiving the transmission of said data packet and said previous packet.

18. (currently amended) The apparatus of claim 16, wherein said ~~combining means~~ adder uses a maximum ratio combining method.

19. (previously presented) The apparatus of claim 16, wherein said maximum combining method is performed according to a signal-to-noise ratio (SNR) symbol of said received packet and said previous packet.

20. (canceled)

Serial No. 10/023,094

21. (currently amended) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is a retransmitted packet when ~~[[the]]~~ corresponding length ~~field fields~~ of said ~~MAC frame~~ for said received packet and said previous packet are the same.

22. (currently amended) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is said retransmitted packet when a retry bit field of said ~~MAC frame~~ for said received packet is activated.

23. (currently amended) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is said retransmitted packet when ~~[[an]]~~ corresponding address ~~field fields~~ of said ~~MAC frame~~ for said received packet and said previous packet are the same.

24. (currently amended) The apparatus of claim 16, wherein said processor further operates to determine that said received packet is said retransmitted packet when ~~[[a]]~~ corresponding sequence control ~~field fields~~ of said ~~MAC frame~~ for said received packet and said previous packet are the same.

25. (new) The method of claim 1, wherein said at least one predetermined criterion is based on corresponding medium access control (MAC) frames of said received packet and said previous packet.

**Serial No. 10/023,094**

26. (new) The apparatus of claim 16, wherein said at least one predetermined criterion is based on corresponding medium access control (MAC) frames of said received packet and said previous packet.